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A study on construction of evaluation index system of automotive enterprises management stability from the view of fine management mode

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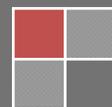
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ABSTRACT

Auto market is booming in China, with increasing investment projects as well as accumulating investment experiences in the auto industry. Based on the substantial investment data, auto enterprises investment management mode is diversified. As enterprise management is an important part in market success, a stable fine management of automotive enterprises is the key to become competitive. With the support of managers, auto project investment management model also gradually shows a more stable development. Thus, it is essential to construct an evaluation index system of the stability in automotive enterprises management.

KEYWORDS

Enterprise management; Evaluation on stability; Fine management; Construction of evaluation index system.



INTRODUCTION

Management is a particular system formed at a certain stage of market demand and technological development needs, it was a complete system composed of principles, methods and regulations. A systematic enterprise management can control the enterprise development on the whole and respond to various changes, thus to provide theoretical support for new plans and objectives, and benefit the settlement of rules, procedures, organizations and methods which are more in line with enterprise development. Some managing methods have formed a complete theoretical system through continuous development and have been used by most enterprises stably. Generally an enterprise has got four capabilities according to its occupations: the capability for external environment analysis, the capability of market competing, the capability to external shocks, and its innovative and adapting ability. These four capabilities mainly depend on the structure of the enterprise management system and enterprise mechanism. To improve the stability of enterprise management is primarily in order to improve these four capabilities as well as the overall enterprise active structures. Enterprise's active structure system includes four elements, namely: economic fundamentals, talent element, mechanism element and organizational productivity elements. Talent element refers to the development, utilization, cultivation and reservation of talents, including talents introduction and present talents cultivation. Mechanism element refers to mutual contact and interaction between the various elements of the enterprise in the process of developing, specifically includes the implementation of business strategy, the distribution of economic benefits and leadership organizations. Elements of organizational productivity, includes the element of science and technology and capital element, the former refers to science and technology innovation ability of enterprises, as well as the ability to use new technologies, while the latter refers to the effective management of capital stocks and flows. There are so many ways to define enterprise management. Due to the more and more complicated social development, experts in enterprise management call the complicated yet inauthoritative and cannot be implemented system analysis mode as "stable system". There is a map of this stable system showed as below Figure 1.

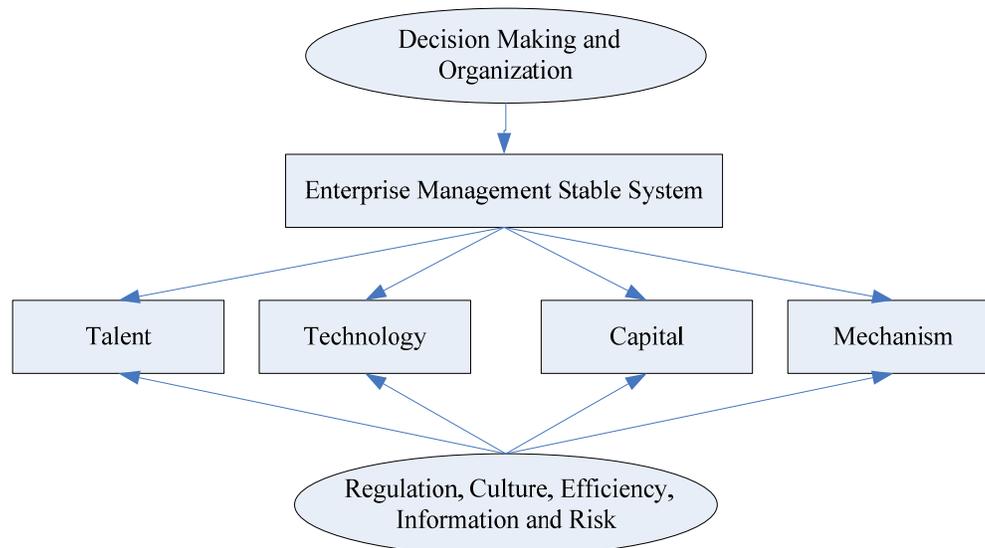


Figure 1 : A map of this stable system

The system includes elements of talent, technology, capital and mechanism. Two functions of decision making and organization are the key to the survival and development of enterprise, which are realized through five subsystems. This system is an open one for the direct interaction between internal and external elements. To systemize the enterprise management is a response to the changing society and market.

THE OBJECTIVE OF AUTO ENTERPRISE PROJECTS INVESTMENT MANAGEMENT

Management is demanded by the market in enterprise, otherwise the enterprise will not survive. In auto enterprises, there are following reasons for the demand of projects investment management.

For the demand of estimated investment in decision-making processes and operating procedures

Enterprises need to formulate enterprise development strategies and management frame, set investment estimates on various solutions of enterprise operating. Business plan is to scientifically allocate the required resources for various operating programs in time and space based on its development strategy objectives. By measuring the detail capital investment and inflows of products in each quarter, enterprises make decisions on the approval of business plans and the future development strategies. Only through reasonable investment estimates can enterprises have a reasonable and strong support for their business plans.

For the demand of investment estimates on ROI calculation

Investment rate of return is a key factor in the outcome of the company's product strategy, also a reference for the evaluation of technical solutions' contribution to society. It is a way to assess the decision and thus to avoid or reduce the risk of the enterprise. Different enterprises set different requirements on rate of return of investment projects. The unreasonable estimate will affect enterprise's business development strategy. So a reasonable estimate of investment determines the level of corporate profitability, which is critical for the development of enterprises.

For the demand of investment management in the projects implementation

Good investment management in process of enterprise project implementation will lay a solid foundation for the successful conclusion of the project, for it is reasonable only when the actual expenditure of investment is in line with the planned expenditure. There are two benefits of investment management: first, it can avoid risks of the project during the operation through a better grasp of the in-time status of enterprise, real-time control corporate spending and budgets, and timely predictions of risk ahead. Second, the investment management will also insure the expenses of project meet the scientific management.

For the demand of investment summary in the end of the project

Investment summary is mainly a timely summary at the end of the project, to type all the expenses and income as well as other costs of enterprises into a system, forming an investment database. Data in the database can be used as a fine calculation of project planning, also a reference for mistake avoiding in the next project design and implementation process.

Based on above, a perfect investment management mode is essential to the fulfillment of enterprise management. For auto enterprise, the management mode of investment is essential for the whole business plan and strategies, is related to the benefit and inheritance of experiences of the enterprise, is key to a continuous and healthy development of the enterprise.

THREE REQUIREMENTS FOR FINE MANAGEMENT IN MODERN AUTOMOTIVE ENTERPRISE

Fine management is one of the modern enterprise management concepts, is a kind of business quest in a highly competitive market, it is also a gradual process, not one prescribed method or measure. Fine management is in every aspect of the enterprise, throughout the whole management level, and is related to the company's survival and development. Here is a statistical chart provided by an authority on automotive industry sales in recent years. The debt statistical chart, the Sales Statistics chart and the total Profit Statistics chart are shown as Figure 2, Figure 3, Figure 4.

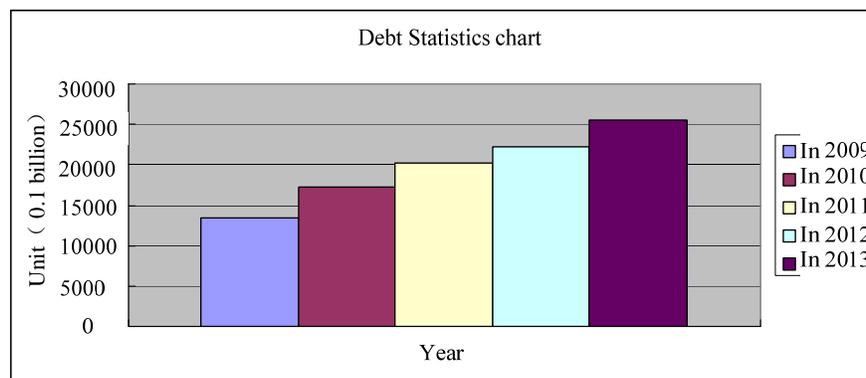


Figure 2 : The debt statistical chart

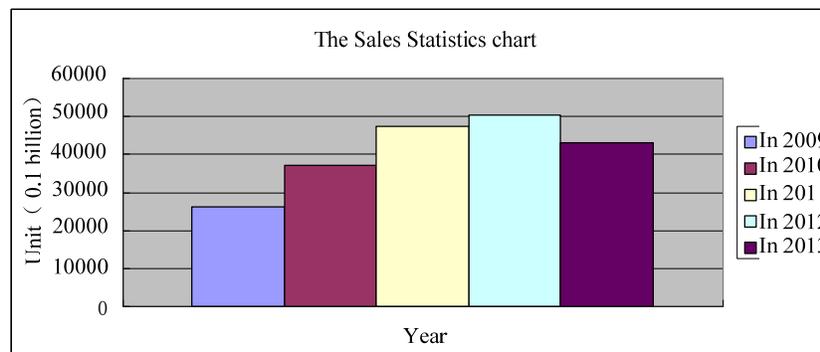


Figure 3 : The sales statistics chart

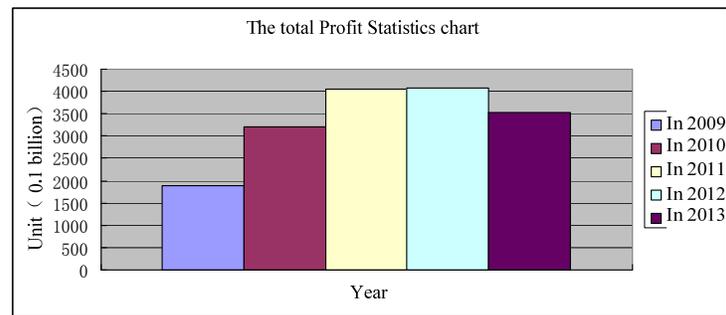


Figure 4 : Total profit statistics

The chart shows that with the rapid development of automobile industry in China, enterprise management is particularly important in recent years for there shows a critical trend in auto industry profits. As compared with well-known foreign companies, China's fine management has not yet made expected progress, so only to further the integration with the global fine management can our enterprises have a more favorable position in the competitive process.

Establishment of modern automobile management system

Fist thing is to make fine and scientific decisions, thus to have a clear-established ownership, and clear division of power and responsibility. Only the modern enterprise management system can accomplish the refinement of business management. Establishing a modern enterprise system is a must for enterprises under modern social and economic system, for it is a dynamic, competitive and innovative enterprise system. Fine management is based on the concept of enterprise refinement, is built on the rule of law of society, rather than the "rule of man" in enterprises. Auto enterprises' profit can be divided into two categories: one is profit from the market mechanism, the other one is from enterprise management. Thus fine management will play its role throughout every detail and aspect.

Clear positioning of enterprise and workable standards

Many of China's medium and small enterprises have applied fine management, but many are not able to do it completely, thus the benefits of fine management won't be so obvious. There are two reasons for this. One is because enterprises are just imitating others without fumbling for their specific fine management modes. The other one is enterprises are too eager to succeed and profit, lack of awareness of own development characters.

Priorities on talents

Fine management in auto is mainly reflected in the production process and management process. According to statistics, in 2004, Toyota's profits doubled the total profits of GM and Ford, and its success lies on the implementation of fine management. One renowned person once said "human behaviors are dominated by motives, so as long as one's certain conditions are met, he will surly work hard to achieve settled goals." Therefore, enterprises must make talents their priority, and meet more conditions of their employees.

CONSTRUCTION OF EVALUATION INDEX SYSTEM OF ENTERPRISE MANAGEMENT STABILITY

A comprehensive evaluation of a modern automobile enterprise evaluation system involves various factors, so the evaluation system will have a lot of uncertainties and randomness. Therefore, to select the appropriate evaluation index is the basis of a comprehensive evaluation. Generally there are two categories of index evaluation, one is an objective evaluation of experts, and the other one is comparison and statistical analysis method. The former is used to cases of lack of data and only relies on the experiences of experts. The latter one is applicable for the quantitative evaluation.

Correspondences of elements set and indicators set

Evaluation elements set are a pile of elements which are relevant to evaluation. Indexes for evaluation are the indicators set. Indicators set is the map of elements set. One evaluation element can correspond to multiple evaluation indicators, thus best solutions can be found among so many correspondences. There are four kinds of mapping between the two sets: namely, one-to-one, many-to-one, one-to-many, many-to-many. Among them, one-to-one is the most simple correspondence and hardly to find in real evaluation.

Principles of construction of index system

There are two principles in this index system construction. One is to be comprehensive and no overlapping, the other one is to be scientific and reasonable. A comprehensive evaluation should reflect all aspects including the auto production, sales, and so on. If the indexes are not sufficient, how can the evaluation be reasonable? Besides, the data collected should be easy to operate and be real; otherwise the system won't operate correctly. A good evaluation index system should meet with the following requirements. First, identify the specific evaluation goals, different evaluation elements are needed for different

evaluation objects. Second, set the right elements coverage and weight proportion in the evaluation process. Third, specify the evaluation object, analysis in evaluation elements set. Fourth, according to different degrees of importance in relationship, decentralize the evaluation elements and establish weight set of elements. Fifth, establish indicators set, collect additional elements relating to the indicators and evaluation indicators, establish evaluation set on correspondences. Sixth, determine the indicator's corresponding evaluation elements; establish the correspondence matrix between indicators and elements. Seventh, specify the difficulty in indicator acquisition, an indicator acquisition difficulty set is preferred. Eighth, calculate the index coverage. Ninth, calculate the objective function value of different indicators. Tenth, through comparison and summary, find the best indicator evaluation set.

Formation of list of elements affecting evaluation

This method is to propose a series of questions to the selected experts in the form of questionnaires, then collect their answers and opinions. One completed answer-question process is a round. Then the opinions of the former round experts will be passed on to the next round experts for opinions, thus repeatedly for the next round opinions. Finally, the opinions will be a great deal of convergence. And the final round experts will have a conclusion on the affecting elements list.

Preliminary layered affecting elements

After calculating the affecting elements put forward by experts in former round, experts will score these elements and have a cluster analysis on the final score. The analysis will layer the factors and thus establish a preliminary indicator system.

MEASURES TO ENSURE THE EFFECTIVE OPERATION OF AUTO ENTERPRISE MANAGEMENT MODE

In the effective operation of an enterprise management mode, personnel play the key role, while fine management system is the way to fulfill aims, and operation is a specific course of action. Settlement on these three factors ensures the unimpeded and effective enterprise management mode and the achievement of strategic goals.

To enhance the professional level of managers and their incident response capability

Modern enterprise management personnel should have appropriate professional quality, can grasp technology and economy at the same time, in order to keep up with the changing dynamics in industries and policies and regulations. Automotive industry is a rapidly growing industry, and there are more demand for professional managers. Since managers "wealth in ethics and technology" are very rare, enterprises should strengthen staff training. For persons who can adapt and respond to market changes are not trained in a day, long-term study and years of experiences are needed. Thus it is necessary to accelerate their growth through training, in order to support the smooth progress of the entire enterprise management layer.

To set up suitable fine management system

Fine management is a must management mode for modern enterprise in increasingly fierce competition. It is not only about experience data from predecessors, but also a fine system of regulations based on clear knowledge of enterprises' own businesses and the development. Only through this can enterprises achieve victory, not being an imitation of others. To realize its effective function, effective personnel management and a great evaluation system is necessary.

To optimize all processes in enterprise management

Managers should write the entire enterprise operation processes into process documents. This is a very large database, for in writing process, different aspects of the processes need to be classified, organized and refined if necessary. In this process, there must be a complete set of processes to ensure a thorough implementation of the management mode. Therefore, a sound, scientific management process is the foundation in its business management playing an active role.

CONCLUSION

Market economy is seeing a rapid development in this fast changing society, and the automotive industry is a rapidly developing one in a rapid development and fast changing market economy. With this background, fine management in auto enterprise will be a card for enterprises' victory in market competing, and a key to their continuous development. Based on the refinement of enterprise management, this study proposes a comprehensive evaluation index system adapting to the social development and enterprise development, thus to provide a strong data support for the present and future development of automotive industry, an assurance for market analysis and prediction for managers. Although it is among new things to apply fine management in auto enterprise in China, we should continue to learn from experiences, lessons and learn strengths in foreign management, to develop our own management style and get strengthened.

REFERENCES

- [1] Chen Qing; A Study on Auto Management Mode[J]. *China Management Magazine*, **4**, (2014).
- [2] Wang Xiping; Analysis on Fleet Management and Vehicle Dispatch[J]. *Heilongjiang Science and Technology Information*, **9**, (2014).
- [3] Zhao Yucheng; Strengthen Fleet Management and Optimize Vehicle Dispatch[J]. *Super Science*, **11**, (2010).

- [4] Huang Junyan; A Preliminary Design for Auto Repair Management System[J]. Heilongjiang Science and Technology Information, **16**, (2013).
- [5] Ding Yanjing; On Methods of Vehicle Management in Modern Enterprises[J]. Technological Pioneers, **1**, (2011).